

**Compliance**

**Reliability Standard Audit Worksheet**

**MOD-029-2a — Rated System Path Methodology**

**Registered Entity:**  *(Must be completed by the Compliance Enforcement Authority)*

**NCR Number:**  *(Must be completed by the Compliance Enforcement Authority)*

**Applicable Function(s):**

Each **TOP** that uses the Rated System Path Methodology to calculate Total

Transfer Capabilities (TTCs) for ATC Paths.

Each **TSP** that uses the Rated System Path Methodology to calculate Available

Transfer Capabilities (ATCs) for ATC Paths.

**Auditors:**

**Disclaimer**

NERC developed this Reliability Standard Audit Worksheet (RSAW) language in order to facilitate NERC’s and the Regional Entities’ assessment of a registered entity’s compliance with this Reliability Standard. The NERC RSAW language is written to specific versions of each NERC Reliability Standard. Entities using this RSAW should choose the version of the RSAW applicable to the Reliability Standard being assessed. While the information included in this RSAW provides some of the methodology that NERC has elected to use to assess compliance with the requirements of the Reliability Standard, this document should not be treated as a substitute for the Reliability Standard or viewed as additional Reliability Standard requirements. In all cases, the Regional Entity should rely on the language contained in the Reliability Standard itself, and not on the language contained in this RSAW, to determine compliance with the Reliability Standard. NERC’s Reliability Standards can be found on NERC’s website at <http://www.nerc.com/page.php?cid=2|20>. Additionally, NERC Reliability Standards are updated frequently, and this RSAW may not necessarily be updated with the same frequency. Therefore, it is imperative that entities treat this RSAW as a reference document only, and not as a substitute or replacement for the Reliability Standard. It is the responsibility of the registered entity to verify its compliance with the latest approved version of the Reliability Standards, by the applicable governmental authority, relevant to its registration status.

The NERC RSAW language contained within this document provides a non‑exclusive list, for informational purposes only, of examples of the types of evidence a registered entity may produce or may be asked to produce to demonstrate compliance with the Reliability Standard. A registered entity’s adherence to the examples contained within this RSAW does not necessarily constitute compliance with the applicable Reliability Standard, and NERC and the Regional Entity using this RSAW reserves the right to request additional evidence from the registered entity that is not included in this RSAW. Additionally, this RSAW includes excerpts from FERC Orders and other regulatory references. The FERC Order cites are provided for ease of reference only, and this document does not necessarily include all applicable Order provisions. In the event of a discrepancy between FERC Orders, and the language included in this document, FERC Orders shall prevail.

# Subject Matter Experts

Identify your company’s subject matter expert(s) responsible for this Reliability Standard. Include the person's title, organization, and the requirement(s) for which they are responsible. Include additional sheets if necessary.

**Response: *(Registered Entity Response Required)***

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| **SME Name** | **Title** | **Organization** | **Requirement** |
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# Reliability Standard Language

**MOD-029-2a — Rated System Path Methodology**

**Purpose:**

To increase consistency and reliability in the development and documentation of transfer capability calculations for short-term use performed by entities using the Rated System Path Methodology to support analysis and system operations.

**Applicability:**

Each **TOP** that uses the Rated System Path Methodology to calculate Total Transfer

Capabilities (TTCs) for ATC Paths.

Each **TSP** that uses the Rated System Path Methodology to calculate Available Transfer

Capabilities (ATCs) for ATC Paths.

**NERC BOT Approval Date: 8/26/2008**

**FERC Approval Date: 11/24/2009**

**Reliability Standard Enforcement Date in the United States: 4/01/2011**

**Question:** As a TOP, do you use the rated System Path Methodology to calculate TTCs for ATC Paths? As a TSP, do you use the Rated System Path Methodology to calculate ATC for ATC Paths?

If the answer to this question is no, this Standard is not applicable.

***(Registered Entity Response Required)***

**Requirements:**

1. When calculating TTCs for ATC Paths, the Transmission Operator shall use a Transmission model which satisfies the following requirements: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]
   1. The model utilizes data and assumptions consistent with the time period being studied and that meets the following criteria:
      1. Includes at least:
         1. The Transmission Operator area. Equivalent representation of radial lines and facilities 161kV or below is allowed.
         2. All Transmission Operator areas contiguous with its own Transmission Operator area. (Equivalent representation is allowed.)
         3. Any other Transmission Operator area linked to the Transmission Operator’s area by joint operating agreement. (Equivalent representation is allowed.)
      2. Models all system Elements as in-service for the assumed initial conditions.
      3. Models all generation (may be either a single generator or multiple generators) that is greater than 20 MVA at the point of interconnection in the studied area.
      4. Models phase shifters in non-regulating mode, unless otherwise specified in the Available Transfer Capability Implementation Document (ATCID).
      5. Uses Load forecast by Balancing Authority.
      6. Uses Transmission Facility additions and retirements.
      7. Uses Generation Facility additions and retirements.
      8. Uses Remedial Action Scheme (RAS) models where currently existing or projected for implementation within the studied time horizon.
      9. Models series compensation for each line at the expected operating level unless specified otherwise in the ATCID.
      10. Includes any other modeling requirements or criteria specified in the ATCID.
   2. Uses Facility Ratings as provided by the Transmission Owner and Generator Owner

**Describe, in narrative form, how you meet compliance with this requirement:**

***(Registered Entity Response Required)***

# R1 Supporting Evidence and Documentation

**Response: *(Registered Entity Response Required)***

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***This section must be completed by the Compliance Enforcement Authority.***

**Compliance Assessment Approach Specific to MOD-029-2a R1**

\_\_\_ Verify the TOP, when calculating the TTC’s for ATC Paths, used a Transmission model which satisfied the following requirements:

\_\_\_ The model utilizes data and assumptions consistent with the time period being studied and meets the following criteria:

At a minimum included:

\_\_\_ The TOP area

\_\_\_ All TOP areas contiguous with its own TOP area

\_\_\_ Any other TOP area linked to the TOPs area by joint operating agreement

\_\_\_ Models all system Elements as in-service for the assumed initial conditions.

\_\_\_ Models all generation (may be either a single generator or multiple generators) that is greater

than 20MVA at the point of interconnection in the studied area.

\_\_\_ Models phase shifters in non-regulating mode, unless otherwise specified in the ATCID.

\_\_\_ Uses Load forecast by Balancing Authority.

\_\_\_ Uses Transmission Facility additions and retirements.

\_\_\_ Uses Generation Facility additions and retirements.

\_\_\_ Uses RAS models where currently existing or projected for implementation within the studied

time horizon.

\_\_\_ Models series compensation for each line at the expected operating level unless specified

otherwise in the ATCID.

\_\_\_ Includes any other modeling requirements or criteria specified in the ATCID.

\_\_\_ Uses Facility Ratings as provided by the Transmission Owner and Generator Owner

**Detailed notes:**

1. The Transmission Operator shall use the following process to determine TTC: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]
   1. Except where otherwise specified within MOD-029-2a, adjust base case generation and Load levels within the updated power flow model to determine the TTC (maximum flow or reliability limit) that can be simulated on the ATC Path while at the same time satisfying all planning criteria contingencies as follows:
      1. When modeling normal conditions, all Transmission Elements will be modeled at or below 100% of their continuous rating.
      2. When modeling contingencies the system shall demonstrate transient, dynamic and voltage stability, with no Transmission Element modeled above its Emergency Rating.
      3. Uncontrolled separation shall not occur.
   2. Where it is impossible to actually simulate a reliability-limited flow in a direction counter to prevailing flows (on an alternating current Transmission line), set the TTC for the non-prevailing direction equal to the TTC in the prevailing direction. If the TTC in the prevailing flow direction is dependent on a Remedial Action Scheme (RAS), set the TTC for the non-prevailing flow direction equal to the greater of the maximum flow that can be simulated in the non-prevailing flow direction or the maximum TTC that can be achieved in the prevailing flow direction without use of a RAS.
   3. For an ATC Path whose capacity is limited by contract, set TTC on the ATC Path at the lesser of the maximum allowable contract capacity or the reliability limit as determined by R2.1.
   4. For an ATC Path whose TTC varies due to simultaneous interaction with one or more other paths, develop a nomogram describing the interaction of the paths and the resulting TTC under specified conditions.
   5. The Transmission Operator shall identify when the TTC for the ATC Path being studied has an adverse impact on the TTC value of any existing path. Do this by modeling the flow on the path being studied at its proposed new TTC level simultaneous with the flow on the existing path at its TTC level while at the same time honoring the reliability criteria outlined in R2.1. The Transmission Operator shall include the resolution of this adverse impact in its study report for the ATC Path.
   6. Where multiple ownership of Transmission rights exists on an ATC Path, allocate TTC of that ATC Path in accordance with the contractual agreement made by the multiple owners of that ATC Path.
   7. For ATC Paths whose path rating, adjusted for seasonal variance, was established, known and used in operation since January 1, 1994, and no action has been taken to have the path rated using a different method, set the TTC at that previously established amount.
   8. Create a study report that describes the steps above that were undertaken (R2.1 – R2.7), including the contingencies and assumptions used, when determining the TTC and the results of the study. Where three phase fault damping is used to determine stability limits, that report shall also identify the percent used and include justification for use unless specified otherwise in the ATCID.

**Describe, in narrative form, how you meet compliance with this requirement:**

***(Registered Entity Response Required)***

**Question:** Do you use three phase fault damping to determine stability limits? If so, provide the required reports.

***(Registered Entity Response Required)***

# R2 Supporting Evidence and Documentation

**Response: *(Registered Entity Response Required)***

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***This section must be completed by the Compliance Enforcement Authority.***

**Compliance Assessment Approach Specific to MOD-029-2a R2**

\_\_\_ Verify the TOP used the following process to determine TTC:

\_\_\_ Adjusted base case generation and Load levels within the updated power flow model to determine the TTC that can be simulated on the ATC Path while at the same time satisfying all planning criteria contingencies as follows, unless otherwise specified within MOD-029-2a:

\_\_\_ When modeling normal conditions, all Transmission Elements will be modeled at or below

100% of their continuous rating.

\_\_\_ When modeling contingencies the system shall demonstrate transient, dynamic and voltage stability, with no Transmission Element modeled above its Emergency Rating.

\_\_\_ Uncontrolled separation shall not occur.

If it is impossible to actually simulate a reliability limited flow in a direction counter to the

prevailing flow:

\_\_\_ Set the TTC for the non-prevailing direction equal to the TTC in the prevailing direction

\_\_\_ Is the TTC in the prevailing flow direction dependent on a RAS?

If so,

\_\_\_ Is the TTC for the non-prevailing flow direction equal to the greater of the maximum flow that can be simulated in the non-prevailing flow direction or the maximum TTC that can be achieved in the prevailing flow direction without the use of a RAS?

\_\_\_ Set TTC on the ATC Path at the lesser of the maximum allowable contract capacity or the reliability limit as determined by R2.1 for an ATC Path whose capacity is limited by contract.

\_\_\_ Develop a nomogram describing the interaction of the paths and the resulting TTC under specified conditions for an ATC path whose TTC varies due to simultaneous interaction with one or more other paths.

\_\_\_ Did the TOP identify any adverse impact on the TTC value of any existing path?

If yes,

\_\_\_ The modeling of the flow on the path being studied at its proposed new TTC level simultaneous with the flow on the existing path at its TTC level while at the same time honoring the reliability criteria outlined in R2.1.

\_\_\_ The TOP included the resolution of this adverse impact in its study report for the ATC Path.

\_\_\_ Allocation of the TTC of that ATC path in accordance with the contractual agreement made by the multiple owners of that ATC Path where multiple ownership of Transmission rights exists on an ATC Path.

\_\_\_ The TTC was set at previously established amount for ATC Paths whose path rating, adjusted for seasonal variance, was established, known and used in operation since January 1, 1994, and no action has been taken to have the path rated using a different method.

\_\_\_Created a study report that describes the steps above that were undertaken (R2.1 – R2.7), including the contingencies and assumptions used, when determining the TTC and the results of the study.

\_\_\_Does the entity use three phase damping to determine stability limits?

If yes,

\_\_\_Verify the report identifies the percent used and justification for use

**Detailed notes:**

1. Each Transmission Operator shall establish the TTC at the lesser of the value calculated in R2 or any System Operating Limit (SOL) for that ATC Path. [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

**Describe, in narrative form, how you meet compliance with this requirement:**

***(Registered Entity Response Required)***

# R3 Supporting Evidence and Documentation

**Response: *(Registered Entity Response Required)***

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***This section must be completed by the Compliance Enforcement Authority.***

**Compliance Assessment Approach Specific to MOD-029-2aR3**

\_\_\_ Verify the TOP established the TTC at the lesser value of the value calculated in R2 or any SOL for that ATC Path.

**Detailed notes:**

1. Within seven calendar days of the finalization of the study report, the Transmission Operator shall make available to the Transmission Service Provider of the ATC Path, the most current value for TTC and the TTC study report documenting the assumptions used and steps taken in determining the current value for TTC for that ATC Path. [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

**Describe, in narrative form, how you meet compliance with this requirement:**

***(Registered Entity Response Required)***

# R4 Supporting Evidence and Documentation

**Response: *(Registered Entity Response Required)***

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***This section must be completed by the Compliance Enforcement Authority.***

**Compliance Assessment Approach Specific to MOD-029-2a R4**

\_\_\_ Verify the TOP made available to the TSP of the ATC Path, the most current value for TTC and the TTC study report documenting the assumptions used and steps taken in determining the current value for TTC for that ATC Path within seven calendar days of the finalization of the study report.

**Detailed notes:**

1. When calculating ETC for firm Existing Transmission Commitments (ETCF) for a specified period for an ATC Path, the Transmission Service Provider shall use the algorithm below: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

ETCF = NLF + NITSF + GFF + PTPF + RORF + OSF

**Where:**

**NLF** is the firm capacity set aside to serve peak Native Load forecast commitments for the time period being calculated, to include losses, and Native Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

**NITSF** is the firm capacity reserved for Network Integration Transmission Service serving Load, to include losses, and Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

**GFF** is the firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider’s Open Access Transmission Tariff or “safe harbor tariff.”

**PTPF** is the firm capacity reserved for confirmed Point-to-Point Transmission Service.

**RORF** is the firm capacity reserved for Roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take Transmission Service when the Transmission Customer’s Transmission Service contract expires or is eligible for renewal.

**OSF** is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using Firm Transmission Service as specified in the ATCID.

**Describe, in narrative form, how you meet compliance with this requirement:**

***(Registered Entity Response Required)***

# R5 Supporting Evidence and Documentation

**Response: *(Registered Entity Response Required)***

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***This section must be completed by the Compliance Enforcement Authority.***

**Compliance Assessment Approach Specific to MOD-029-2a R5**

\_\_\_ Verify the TSP used the algorithm below for calculating ETC for firm Existing Transmission

Commitments for a specific period for an ATC Path.

ETCF = NLF + NITSF + GFF + PTPF + RORF + OSF

**Detailed notes:**

1. When calculating ETC for non-firm Existing Transmission Commitments (ETCNF) for all time horizons for an ATC Path the Transmission Service Provider shall use the following algorithm: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

ETCNF = NITSNF + GFNF + PTPNF + OSNF

**Where:**

**NITSNF** is the non-firm capacity set aside for Network Integration Transmission Service serving Load (i.e., secondary service), to include losses, and load growth not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

**GFNF** is the non-firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider’s Open Access Transmission Tariff or “safe harbor tariff.”

**PTPNF** is non-firm capacity reserved for confirmed Point-to-Point Transmission Service.

**OSNF** is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

**Describe, in narrative form, how you meet compliance with this requirement:**

***(Registered Entity Response Required)***

# R6 Supporting Evidence and Documentation

**Response: *(Registered Entity Response Required)***

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***This section must be completed by the Compliance Enforcement Authority.***

**Compliance Assessment Approach Specific to MOD-029-2a R6**

\_\_\_ Verify the TSP used the algorithm below for calculating ETC for non-firm Existing Transmission

Commitments for all time horizons for an ATC Path.

ETCNF = NITSNF + GFNF + PTPNF + OSNF

**Detailed notes:**

1. When calculating firm ATC for an ATC Path for a specified period, the Transmission Service Provider shall use the following algorithm: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

ATCF = TTC – ETCF – CBM – TRM + PostbacksF + counterflowsF

**Where**

**ATCF** is the firm Available Transfer Capability for the ATC Path for that period.

**TTC** is the Total Transfer Capability of the ATC Path for that period.

**ETCF** is the sum of existing firm commitments for the ATC Path during that period.

**CBM** is the Capacity Benefit Margin for the ATC Path during that period.

**TRM** is the Transmission Reliability Margin for the ATC Path during that period.

**PostbacksF­** are changes to firm Available Transfer Capability due to a change in the use of Transmission Service for that period, as defined in Business Practices.

**counterflowsF** are adjustments to firm Available Transfer Capability as determined by the Transmission Service Provider and specified in their ATCID.

**Describe, in narrative form, how you meet compliance with this requirement:**

***(Registered Entity Response Required)***

# R7 Supporting Evidence and Documentation

**Response: *(Registered Entity Response Required)***

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***This section must be completed by the Compliance Enforcement Authority.***

**Compliance Assessment Approach Specific to MOD-029-2a R7**

\_\_\_ Verify the TSP used the algorithm below for calculating firm ATC for an ATC Path for a

specified period.

ATCF = TTC – ETCF – CBM – TRM + PostbacksF + counterflowsF

**Detailed notes:**

1. When calculating non-firm ATC for an ATC Path for a specified period, the Transmission Service Provider shall use the following algorithm: [*Violation Risk Factor: Lower*] [*Time Horizon: Operations Planning*]

ATCNF = TTC – ETCF – ETCNF – CBMS – TRMU + PostbacksNF + counterflowsNF

**Where:**

**ATCNF** is the non-firm Available Transfer Capability for the ATC Path for that period.

**TTC** is the Total Transfer Capability of the ATC Path for that period.

**ETCF** is the sum of existing firm commitments for the ATC Path during that period.

**ETCNF** is the sum of existing non-firm commitments for the ATC Path during that period.

**CBMS** is the Capacity Benefit Margin for the ATC Path that has been scheduled during that period.

**TRMU** is the Transmission Reliability Margin for the ATC Path that has not been released for sale (unreleased) as non-firm capacity by the Transmission Service Provider during that period.

**PostbacksNF**­ are changes to non-firm Available Transfer Capability due to a change in the use of Transmission Service for that period, as defined in Business Practices.

**counterflowsNF**are adjustments to non-firm Available Transfer Capability as determined by the Transmission Service Provider and specified in its ATCID.

**Describe, in narrative form, how you meet compliance with this requirement:**

***(Registered Entity Response Required)***

# R8 Supporting Evidence and Documentation

**Response: *(Registered Entity Response Required)***

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***This section must be completed by the Compliance Enforcement Authority.***

**Compliance Assessment Approach Specific to MOD-029-2a R8**

\_\_\_ Verify the TSP used the algorithm below for calculating non-firm ATC for an ATC Path for a

specified period.

ATCNF = TTC – ETCF – ETCNF – CBMS – TRMU + PostbacksNF + counterflowsNF

**Detailed notes:**

# Supplemental Information

**Other ‑** The list of questions above is not all inclusive of evidence required to show compliance with the Reliability Standard. Provide additional information here**, as necessary that** demonstrates compliance with this Reliability Standard.

**Entity** **Response: *(Registered Entity Response)***

# Compliance Findings Summary (to be filled out by auditor)

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**Excerpts from FERC Orders -- For Reference Purposes Only**

**Updated Through October 25, 2016**

**MOD-029-2a**

[***Revisions to Emergency Operations Reliability Standards; Revisions to Undervoltage Load Shedding Reliability Standards; Revisions to the Definition of “Remedial Action Scheme” and Related Reliability Standards*, Order No. 818, 153 FERC ¶ 61,228 (2015).**](http://www.nerc.com/FilingsOrders/us/FERCOrdersRules/Order%20No.%20818%20approving%20revised%20reliability%20standards.pdf)

P 1. “Pursuant to section 215 of the Federal Power Act (FPA), the Commission approves Reliability Standards and definitions of terms submitted in three related petitions by the North American Electric Reliability Corporation (NERC), the Commission-approved Electric Reliability Organization (ERO).”

23. “On February 3, 2015, NERC filed a petition seeking approval of a revised definition of Remedial Action Scheme in the NERC Glossary, as well as modified Reliability Standards that incorporate the new Remedial Action Scheme definition and eliminate use of the term Special Protection System, and the associated implementation plan.31”

**“31** NERC RAS Petition at 1-2. NERC requested approval of the following Reliability Standards to incorporate the proposed definition of Remedial Action Scheme and eliminate use of the term Special Protection System: EOP-004-3, PRC-005-3(ii), PRC-023-4, FAC-010-3, TPL-001-0.1(i), FAC-011-3, TPL-002-0(i)b, MOD-030-3, TPL-003-0(i)b, MOD-029-2a, PRC-015-1, TPL-004-0(i)a, PRC-004-WECC-2, PRC-016-1, PRC-001-1.1(i), PRC-005-2(ii), PRC-017-1. NERC did not propose any changes to the Violation Risk Factors or Violation Severity Levels for the modified standards.”

[***North American Electric Reliability Corporation*, 132 FERC ¶ 61,239 (2010).**](http://www.nerc.com/files/OrderApproving_Interpretations_MOD-001_MOD-029_20100916%20(2).pdf)

P 5. “In a December 2, 2009 filing, NERC petitioned the Commission to approve interpretations to certain requirements of two MOD Reliability Standards. [Footnote omitted.] NERC states that the New York Independent System Operator (NYISO) requested NERC to interpret these provisions. NERC requests that the interpretations be made effective immediately upon Commission approval. As a preliminary matter, NERC states that the NERC Board of Trustees, contemporaneous with Board approval of the MOD interpretation, also adopted a resolution providing that “requests for a decision on how a reliability standard applies to a registered entity’s particular facts and circumstances should not be addressed through the interpretations process.” [Footnote omitted.] NERC states that NYISO’s request is an example of such a request and NERC does not expect similar fact-specific interpretations in the future.”

P 19. “NYISO comments that the Commission should approve NERC's proposed interpretation of MOD-029-1. It states that the ATC MOD Standards require all transmission service providers to adopt one of three ATC calculation methodologies, and that NYISO has determined that the "Rated System Path Methodology" established under MOD-029-1 appears to be most readily compatible with its financial reservation model.

NYISO is uncertain, however, whether that methodology is sufficiently flexible to accommodate NYISO’s practice of using "Transmission Flow Utilization," i.e., the output of its market software, in calculating ATC. NYISO does believe, however, that MOD-029-1 allows transmission service providers to account for capacity associated with "other services" when calculating their firm and non-firm Existing Transmission Commitments (ETC), and that the definition of "other services" that is included in the OSF and OSNF variables in the ETC calculation formulae in R5 and R6 of MOD-029-1 appears on its face to be broad enough to encompass "Transmission Flow Utilization.”

P 20. “We approve NERC's proposed interpretation of Reliability Standards MOD-001-1 and MOD-029-1, effective on the issuance of this order, as requested by NERC. For the reasons stated below, we find the interpretations submitted by NERC to be just, reasonable, not unduly discriminatory or preferential, and in the public interest. Further, we agree with NERC that, for the future, a request for interpretation that pertains to the particular facts and circumstances of a registered entity should not be addressed through the interpretations process. Additionally, we note that NYISO states that "the NYISO OATT’s definition of 'ATC' . . . does not fully reflect the 'advisory' nature of most NYISO ATC calculation." [Footnote omitted.] To the extent that NYISO's tariff does not reflect its actual mode of operation, we note that NYISO is required to take steps to ensure that its tariff and its actual operations are in harmony. NYISO further states that it is initiating a stakeholder process to update the definition of ATC in its tariff, and we encourage it to do so expeditiously.”

P 28. “Requirements R5 and R6 of MOD-029-1 provide that Existing Transmission Commitments (ETC) consists of Native Load, Network Integration Transmission Service, Point-to-Point Service, grandfathered contracts, service governed by rollover rights, and "other" firm services (OSF) or non-firm services (OSNF). NYISO asked whether OSF and OSNF could be calculated using Transmission Flow Utilization in the determination of ATC. According to NERC’s interpretation, including Transmission Flow Utilization within the "other services" contemplated by Requirements R5 and R6 is appropriate, provided that Transmission Flow Utilization does not include Native Load, Point-to-Point Service, Network Integration Transmission Service, or any of the other components explicitly defined in Requirements R5 and R6.”

P 29. “We agree with NERC’s interpretation and conclude that the interpretation is just, reasonable, not unduly discriminatory or preferential and in the public interest. The purpose of OSF and OSNF is to account for any committed transmission uses that are not accurately described in the other terms in the ETC formulae. Since NYISO does treat OSF and OSNF as committed uses, and no other term describes this commitment, this is appropriate.”

[***Mandatory Reliability Standards for the Calculation of Available Transfer Capability, Capacity Benefit Margins, Transmission Reliability Margins, Total Transfer Capability, and Existing Transmission Commitments and Mandatory Reliability Standards for the Bulk-Power System*, Order No. 729, 129 FERC ¶ 61,155 (2009), *order on reh’g*, Order No. 729-A, 131 FERC ¶ 61,109 (2010)**, ***order on reh’g and reconsideration*, Order No. 729-B, 132 FERC ¶ 61,027 (2010).**](https://www.ferc.gov/whats-new/comm-meet/2009/111909/E-6.pdf)

P 171. “The Commission finds that MOD-028-1 and MOD-029-1 fail to address the directive in Order No. 693 to specify how transmission service providers should determine which generators should be modeled in service when calculating available transfer capability.Specifically, the Commission directed the ERO to develop a modification to the Reliability Standards to specify that base generation schedules used in the calculation of available transfer capability will reflect the modeling of all designated network resources and other resources that are committed to or have the legal obligation to run, as they are expected to run, and to address the effect on available transfer capability of designating and undesignating a network resource.”

P 173. “The Commission therefore directs the ERO, pursuant to section 215(d)(5) of the FPA and section 39.5(f) of our regulations, to develop a modification to MOD-028-1 and MOD-029-1 to specify that base generation schedules used in the calculation of available transfer capability will reflect the modeling of all designated network resources and other resources that are committed to or have the legal obligation to run, as they are expected to run, and to address the effect on available transfer capability of designating and undesignating a network resource.”

**Revision History**

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| **Version** | **Date** | **Reviewers** | **Revision Description** |
| 1 | 11/3/2016 | NERC Compliance Assurance, RSAW Task Force | New document. Replaced SPS with RAS |